



IFW

PTO/SB/21 (02-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/676,777
	Filing Date	October 1, 2003
	First Named Inventor	Li et al.
	Art Unit	
	Examiner Name	
Total Number of Pages in This Submission	Attorney Docket Number	5853-417

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	PTO/SB/08B; 8 References; and 1 Postcard.
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Neil R. Jetter AKERMAN SENTERFITT
Signature	
Date	April 28, 2004

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Neil R. Jetter		
Signature		Date	April 28, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 22 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Application of LI et al.

Application No.: 10/676,777

Examiner:

Date Filed: October 1, 2003

Group:

For: DOUBLY CONSTRAINED ROBUST CAPON BEAMFORMER

CERTIFICATE UNDER 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 28, 2004.

Neil R. Jetter

Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450

Date: April 28, 2004

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to the Duty to Disclose under 37 C.F.R. §1.56, Applicants hereby disclose information that may be relevant to the Examiner's consideration of the above-identified application and the patentability of its claims.

In accordance with Rules 56, 97, and 98 of the Rules of Practice in Patent Cases (37 C.F.R. §§ 1.56, 1.97, and 1.98), Form PTO/SB/08B and copies of references cited therein are submitted for consideration by the Examiner. While the references provided in this Information Disclosure Statement may be material to patentability pursuant to 37 C.F.R. § 1.56, it is not intended to constitute an admission that any reference referred to herein is prior art for this invention unless specially designated as such. Also, in accordance with 37 C.F.R. § 1.97(g), the

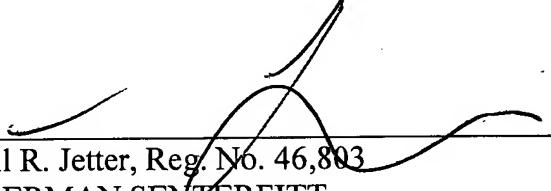
{WP178038;1}

In re Application of: LI et al.
Application No.: 10/676,777
Filed: October 1, 2003
Group Art Unit:
For: DOUBLY CONSTRAINED ROBUST CAPON
BEAMFORMER

filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists.

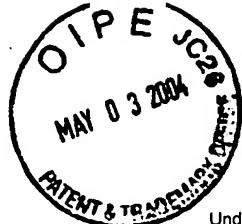
This Information Disclosure Statement is being filed before the issuance of a first office action on the merits of the application (37 C.F.R. 1.97(b)(3)); therefore, no fee is believed to be due. However, if any fee is due, the Commissioner is authorized to charge any such fee and any additional fees due or credit any overpayment to Deposit Account No. 50-0951.

Respectfully submitted,



Neil R. Jetter, Reg. No. 46,803
AKERMAN SENTERFITT
222 Lakeview Avenue, Suite 400
Post Office Box 3188
West Palm Beach, FL 33402-3188
Telephone: (561) 653-5000
Facsimile: (561) 659-6313

Docket No. 5853-417



PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/676,777
		Filing Date	October 1, 2003
		First Named Inventor	LI et al.
		Art Unit	
Examiner Name		Attorney Docket Number	5853-417
Sheet	1	of	1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		STOICA et al., "Robust Capon Beamforming," IEEE Signal Processing Letters 10:172-175, 2003.	
		LI et al., "On Robust Capon Beamforming and Diagonal Loading," IEEE Signal Processing Letters 51:1702-1715, 2003.	
		VOROBYOV et al., "Robust Adaptive Beamforming Using Worst-Case Performance Optimization: A Solution to the Signal Mismatch Problem," IEEE Signal Processing Letters 51:313-324, 2003.	
		LORENZ et al., "Robust Minimum Variance Beamforming," Information Systems Laboratory, Stanford University 1-16.	
		WU et al., "A NEW ROBUST BEAMFORMING METHOD WITH ANTENNAE CALIBRATION ERRORS," IEEE 869-872, 1999.	
		MARZETTA, T., "A New Interpretation for Capon's Maximum Likelihood Method of Frequency-Wavenumber Spectral Estimation," IEEE Transactions on Acoustics, Speech, and Signal Processing ASSP-31:445-449, 1983.	
		STOICA et al., "Robust Capon Beamforming," IEEE 876-880, 2002.	
		LI et al., "ON ROBUST CAPON BEAMFORMING AND DIAGONAL LOADING," ICASSP 337-340, 2003.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.